	Туре	L#	Hits	Search Text	DBs	Time Stamp	C o m m	r D ef in	
1	BRS	L1	12252	(wavelenghth or light or UV or ultraviolet or "white light" or visible) and (semiconductor	US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:33			0
2	BRS	L8	832	(bolish\$30) same ((detect\$3) or ("endpoint" adj detect\$3)) same (wavelenghth or light or UV or ultraviolet or "white light" or visible) same (semiconductor or wafer or substrate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:07			0
3	BRS	L15	364	8 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0
4	BRS	L22	50	15 and 438/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:36			0
5	BRS	L29	34	8 and dress\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:02			0
6	BRS	L36	4	8 and ((dress\$3 with (pressure or tool or type or pad)) same (polish\$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:06			0
7	BRS	L43	56	(polish\$3 or cmp or ("chemical mechanical" adj polish\$3)) same ((dress\$3 with (pressure or tool or type or pad)) same (polish\$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:21			0
8	BRS	L50	<u></u>	43 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0

	Туре	L#	Hits	Search Text	DBs	Time Stamp	0 E E	ef in iti	Er ro rs
9	BRS	L57	56	(pressure or tool or type or rock\$3 or	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:22			0

	Туре	L#	Hits	Search Text	DBs	Time Stamp	C o m m	r D ef in	Er ro rs
1	BRS	L1	12252	(wavelenghth or light or UV or ultraviolet or "white light" or visible) and (semiconductor	US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:33			0
2	BRS	L8	832	(polish\$30 substrate) chemical mechanical adj polish\$3)) same ((detect\$3) or ("endpoint" adj detect\$3)) same (wavelenghth or light or UV or ultraviolet or "white light" or visible) same (semiconductor or wafer or substrate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:07			0
3	BRS	L15	364	8 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0
4	BRS	L22	50	15 and 438/\$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 16:36			0
5	BRS	L29	34	8 and dress\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:02			0
6	BRS	L36	4	8 and ((dress\$3 with (pressure or tool or type or pad)) same (polish\$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:06			0
7	BRS	L43	56	(polish\$3 or cmp or ("chemical mechanical" adj polish\$3)) same ((dress\$3 with (pressure or tool or type or pad)) same (polish\$3 adj rate))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:21			0
8	BRS	L50	11	43 and @pd<=19991018	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/12/14 18:08			0

	Туре	L#	Hits	Search Text	DBs	Time Stamp	Comments	r D ef in iti	Er ro rs
9	BRS	L57	56	(pressure or tool or type or rock\$3 or wibrat\$3 or pad)) same (polich\$3 adi rate)).	FPO: JPO:	2002/12/14 18:22			0

US-PAT-NO: 4600469

DOCUMENT-IDENTIFIER: US 4600469 A

TITLE: Method for polishing detector material

 KWIC	
 IVANIC	

The rate of flow of etchant 100 over pad 12 is not critical to the success of the method of the present invention, as long as pad 12 is kept saturated with etchant 100. Typically, plate 10 moves at a speed to produce a surface speed at wafer 24 of approximately 180 inches per minute. A relatively light pressure, for example 150 to 750 grams per square inch, may be placed on wafer

24 in order to insure contact with pad 12 and an adequate rate of material removal. It is understood that these speeds and pressures may be varied significantly, depending on the rate of removal desired, and the type of material selected for pad 12 and the type of <u>detector</u> material being <u>polished</u>. The use of the suggested pressure and plate speed, in combination with use of a

Collussus LP-57 pad and 1:1 solution of etchant 100, results in a removal rate of approximately one (1) micron per minute.

US-PAT-NO: 5846882

DOCUMENT-IDENTIFIER: US 5846882 A

TITLE: Endpoint detector for a chemical mechanical polishing system

 KWIC	
 IVAAIC	

The methods of the first type typically require access to at least a portion of the substrate surface being polished, such as by sliding a portion of the substrate over the edge of the polishing pad, and simultaneously analyzing the exposed portion of the substrate. For example, where polishing is used to expose metal lines embedded in a dielectric layer, the overall or composite reflectivity of the surface being polished changes as the lines are exposed. By monitoring the reflectivity of the polished surface or the wavelength of light reflected from the surface, the exposure of the lines through the dielectric layer, and thus the polishing endpoint, can be detected. However, this method does not provide a way of determining the polishing endpoint unless

an underlying layer is exposed during **polishing**. Additionally, it is somewhat erratic in predicting the **polishing** endpoint unless all of the underlying lines are simultaneously exposed. Furthermore, the **detection** apparatus is delicate and subject to frequent breakdown caused by the exposure of the measuring or **detecting** apparatus to the slurry.